The short- and long-term benefit in chronic low back pain through adjuvant electrical versus manual auricular acupuncture.


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Acupuncture is an established adjuvant analgesic modality for the treatment of chronic pain. Electrical stimulation of acupuncture points is considered to increase acupuncture analgesia. In this prospective, randomized, double-blind, controlled study we tested the hypothesis that auricular electroacupuncture (EA) relieves pain more effectively than conventional manual auricular acupuncture (CO) in chronic low back pain patients with insufficient pain relief (visual analogue scale [VAS] > or = 5) treated with standardized analgesic therapy. Disposable acupuncture needles were inserted in the auricular acupuncture points 29, 40, and 55 of the dominant side and connected to a newly developed battery-powered miniaturized stimulator worn behind the ear. Patients were randomized into group EA (n = 31) with continuous low-frequency auricular EA (1 Hz biphasic constant current of 2 mA) and group CO (n = 30) without electrical stimulation (sham-electroacupuncture). Treatment was performed once weekly for 6 wk, and in each group needles were withdrawn 48 h after insertion. During the study period and a 3-mo follow-up, patients were asked to complete the McGill questionnaire. Psychological well being, activity level, quality of sleep, and pain intensity were assessed by means of VAS; moreover, analgesic drug consumption was documented. Pain relief was significantly better in group EA during the study and the follow-up period as compared with group CO. Similarly, psychological well-being, activity, and sleep were significantly improved in group EA versus group CO, the consumption of analgesic rescue medication was less, and more patients returned to full-time employment. Neuropathic pain in particular improved in patients treated with EA. There were no adverse side effects. These results are the first to demonstrate that continuous EA stimulation of auricular acupuncture points improves the treatment of chronic low back pain in an outpatient population. IMPLICATIONS: Continuous electrical stimulation of auricular acupuncture points using the new point stimulation device P-stim significantly decreases pain intensity and improves psychological well-being, activity, and sleep in chronic low back pain patients.